

Application Number 10/568348  
Response to the Office Action dated May 16, 2008

REMARKS

Favorable reconsideration of this application is requested in view of the following remarks.

The specification has been amended editorially to include citations of the Documents 1 and 2 listed in page 3, lines 3 and 4, and clarify the meaning of an abbreviation "GOD" at that first appearance of glucose oxidase in the specification. Further the specification has been amended to clarify that the liquid absorber is "a liquid reservoir" as having been used in the specification, for example, at page 6, lines 1-5 and page 11, lines 1-3 and as supported by Figs. 2-3.

Claims 7 and 10-20 have been canceled without prejudice.

Claim 1 has been amended to include limitations as supported by Figs. 1-3, the specification at page 7, lines 20-21, page 8, lines 15-25, and page 11, lines 1-17, and original claims 16-17; claim 6 has been amended as supported by the specification at page 12, line 17 – page 13, line 4; claim 8 has been amended as supported by Figs. 2-3, the specification at page 6, lines 1-10 and page 11, lines 1-17, and original claims 16-17 in addition to editorial revisions; claim 9 has been amended to clarify the structure of the two electrodes and two needles in the glucose sensor as supported by Fig. 2 and the specification at page 6, lines 1-7 and page 11, lines 1-22.

Claim 21 has been added as supported by original claim 1 and includes limitations of the insulating substrate as supported by Figs. 5-6 and the specification at page 14, line 21 – page 15, line 14, and page 16, lines 1-3; claims 22, 25, 27, and 28 have been added as supported by original claims 2-5, respectively; claim 23 has been added as supported by original claim 6 and 10 and the specification at page 16, lines 4-9; claim 24 has been added as supported by original claim 11; claim 26 has been added as supported by Figs.

Application Number 10/568348  
Response to the Office Action dated May 16, 2008

5-6; and claim 29 has been added as supported by Fig. 4, original claim 12, and the specification at page 11, line 23 – page 12, line 16.

The specification has been objected to because of informalities. The specification has been amended to include citations of patent documents 1 and 2 and the abbreviation “GOD” at the first appearance of “glucose oxidase”. Accordingly, this objection should be withdrawn.

Claims 1-20 have been rejected under 35 U.S.C. 102(a) as being anticipated by Yamaoka et al. (U.S. Patent Application Publication No. 2006/0035300). Applicant respectfully traverses this rejection.

Claims 7 and 10-20 have been canceled and the rejections of these claims are moot. Claims 21-29 have been added.

Yamaoka discloses a measuring apparatus with two electrodes but fails to disclose an apparatus that has two hollow needles projecting out from the housing that stick into the skin and sample the body fluid and supply it to the electrodes as claim 1 requires (see Figs. 2-3 and paras. [0045]-[0046]). Further, claim 1 requires that one needle supply the sample fluid to the working electrode, that the other needle supply the sample fluid to the counter electrode, and that the working electrode include the conductive component and glucose dehydrogenase (GDH). In the reference, however, the sample fluid is supplied through the sample introduction port (25a) to the electrodes (26b) and (27b) and not supplied through the needles included in the glucose sensor (see Figs. 2-3 and para. [0061]), and GDH is included in the reagent layer (28) to which the sample is supplied through a capillary (25) (see Figs. 2-3 and paras. [0067]-[0068]). The reagent layer in the reference is not the electrode.

In addition, claim 21 requires, in addition to the working electrode that includes the conductive component and GDH, a narrowed portion of the insulating substrate that is embedded under skin and on which at least part of the working electrode and the counter electrode are formed. The reference, however, discloses that the reagent layer includes the GDH and fails to disclose the working electrode that includes a conductive

Application Number 10/568348  
Response to the Office Action dated May 16, 2008

component and GDH as discussed above. The reference further fails to disclose the insulating substrate that has a narrowed portion, which is embedded under skin and on which at least part of the working electrode and the counter electrode are formed.

Accordingly, claims 1 and 21 are distinguished from Yamaoka.

Further, the international application of Yamaoka was filed on June 16, 2003 the earliest but was published in Japanese. Therefore, the reference's international filing date is not available for a 35 U.S.C. 102(e) date. The foreign priority application of Yamaoka, Japanese Patent Application No. 2002-176368, was filed on June 17, 2002, and accordingly, it could not have been published before 18 months from the filing date, i.e., December 17, 2003. This would be the earliest possible 35 U.S.C. 102(a) date. The foreign priority application of the present application was filed on September 3, 2003 (a verified translation of the Japanese Patent Application No. 2003-310019 is attached hereto). Therefore, Yamaoka cannot be prior art against the present application.

Accordingly, this rejection should be withdrawn.

Claims 1-20 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Inose et al. (*Biochimica et Biophysica Acta* 1645 (2003) 133-138) in view of Sode (U.S. Patent No. 7,094,585), Sode (U.S. Patent Application Publication No. 2006/0211094), Sode (U.S. Patent Application Publication No. 2006/0252123), Yamaoka et al. (U.S. Patent Application Publication No. 2006/0094098), Hogen Esch (U.S. Patent No. 5,372,133), and Sode et al. (U.S. Patent No. 7,244,600). Applicant respectfully traverses this rejection.

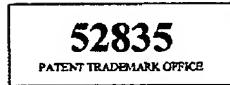
Inose and Sode references disclose a particular type of GDH such as *Burkholderia cepacia*, for example, at page 1 of Inose, but none of these references discloses features of a glucose sensor, such as the first and the second needles projecting from the housing that stick into the skin, sample body fluid, and supply the sample body fluid to the working electrode and the counter electrode, respectively, as claim 1 requires and the narrowed portion of the insulating substrate, which is embedded under the skin and on which at least part of the working electrode and the counter electrode are formed as claim 21 requires. In addition, Hogen Esch discloses a glucose sensor device that includes a

Application Number 10/568348  
Response to the Office Action dated May 16, 2008

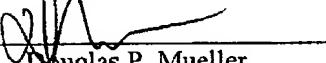
counter-electrode (8), a work electrode (10), and a reference electrode (9) and that the work electrode includes a membrane with hollow fibers, whose internal walls are coated with a conductive polymer and in which an enzyme is located (see Fig. 1, coln. 2, line 62 – coln. 3, line 17, coln. 3, lines 57-54, and coln. 5, lines 12-16). However, Hogan Esch also fails to disclose the two hollow needles projecting out from the housing as claim 1 requires and the insulating substrate that has a narrowed portion which is projecting out from the housing and on which at least part of the working electrode and the counter electrode are formed as claim 21 requires. Accordingly, claims 1 and 21 are distinguished from the Inose in view of the references listed above, and this rejection should be withdrawn.

In view of the above, Applicant requests reconsideration of the application in the form of a Notice of Allowance.

Respectfully submitted,



HAMRE, SCHUMANN, MUELLER &  
LARSON, P.C.  
P.O. Box 2902  
Minneapolis, MN 55402-0902  
(612) 455-3800

By:   
Douglas P. Mueller  
Reg. No. 30,300

Dated: September 15, 2008

DPM/my/ad